

REMARKS

Reconsideration of the pending application is respectfully requested in view of the following observations.

In the claims

Claims 1, 15, and 17 have been amended.

Claim 1 has been amended to recite the feature of a switching apparatus “switches on the communication element when it has received the control signal from the measuring device by connecting the communication element to an energy source.”

Support for this amendatory language may be found at least in paragraphs [0036] and [0039]-[0041] and Fig 2.

Claims 1 and 17 have been amended to clarify indefinite language identified in the Office Action.

Claim 15 has been amended similarly to amended claim 1 and has also been amended to clarify indefinite language identified in the Office Action.

No new matter is introduced by the amendment to the claims. Entry of the amendment to the claims is kindly requested.

Rejection of the claims under 35 USC § 112, second paragraph

Reconsideration of this amendment is kindly requested in view of the amendment to the claims 1, 15, and 17.

In claims 1 and 17, “a control signal” in the claims has been changed to “the control signal.”

In claim 15, the term “parameter” has been changed to “property” to make the language used consistent throughout the claims.

It is submitted that the amendment to the claims makes the claims conform to 35 USC § 112, second paragraph.

Withdrawal of this rejection is kindly requested.

Rejection of claims 1-6, 8-12, 15, and 17 under 35 USC 103(a) as being unpatentable over US patent 5,287,112 (*Schuermann*) in view of US patent 6,905,074 (*Charrat*) and US 2002/0149376 (*Haffner*)

Reconsideration of this rejection is respectfully requested, in view of the amendment to claims 1 and 15, on the basis that the rejection fails to establish a *prima facie* case of obviousness with respect to claims 1.

Amended claim 1 recites a communication apparatus for setting up a data connection between intelligent devices, comprising:

- a transmission oscillator for carrying out a contactless data exchange, said oscillator including a coil;

- a communication element which is connected to the coil and to a data processing component of an intelligent device and which emits search signals via the coil to receive a response from another intelligent device,

- a measuring device for monitoring a property of the transmission oscillator which outputs a control signal when ascertaining a change of the monitored property,

the monitored property of the transmission oscillator includes the frequency or impedance of the transmission oscillator in resonance,

and a switching apparatus which is connected to the measuring device and the communication element and which switches on the communication element when it has received the control signal from the measuring device by connecting the communication element to an energy source.

It is submitted that the proposed combination of *Schuermann*, *Charrat*, and *Haffner* fails to disclose all of the features of amended claim 1.

First, the cited references do not disclose a switching apparatus switching on the communication element when it has received the control signal from the measuring device by connecting the communication element to an energy source.

Schuermann is directed to a transponder (10) which uses a control circuit (16) to control modulator (48) which opens and closes switch (50) to change the resonant frequency of the resonant circuit (28) by connecting and disconnecting capacitor (52) from ground (see col. 3, lines 27-36 and Fig. 1). Thus, *Schuermann* does not disclose a switching apparatus as required by amended claim 1.

The rejection also acknowledges that *Schuermann* does not disclose a switching element which is connected to the measuring device and the communication element and switches on the communication element when it receives the control signal from the measuring device. *Charrat* is relied on for the disclosure of this feature.

Charrat, however, does not cure the deficiencies of *Schuermann*. *Charrat* discloses a contactless integrated circuit reader having a power saving mode (see Title). More specifically, the reader of *Charrat* saves power by using magnetic field pulses which

are much shorter than that of classical magnetic field bursts and spacing out the pulses at larger intervals (see col. 7, lines 25-30).

The method of saving power used in *Charrat* is fundamentally different from the mechanism used in amended claim 1. Amended claim 1 requires a switch which physically connects and disconnects the energy source from the communication element (see also Fig. 2). In contrast, *Charrat* reduces power consumption by having the magnetic field operate for shorter periods of time and operate less frequently which results in the use of less current overall. *Charrat* does not explicitly show an energy source in Fig. 3 and only generally discloses that a reader (10) has an autonomous power supply system, such as a battery or a cell, or may be powered by hard wired power sources (see col. 11, lines 8-13). *Charrat* is silent as to the specific connection of circuit in the reader and the energy source. Therefore, *Charrat* does not disclose switching on a communication by connecting the element to an energy source as required by amended claim 1.

Moreover, *Charrat* does not disclose the microprocessor cutting off power from certain circuits to conserve energy. *Charrat* reduces power usage through current and explicitly states so in disclosing that the described features “save on current consumption of a reader (10) having an autonomous power supply” using the method described above (see col. 11, lines 8-13). Further, *Charrat* describes the microprocessor as having various ports (PT₁-PT_N) (see Fig. 3). None of these ports (PT₁-PT_N) are shown or described as being used to issue a circuit power down command or to power down a circuit.

As seen in Fig. 3, port (PT₁) links data to be transmitted (DT_x) to the modulator circuit (MODC) of data sending circuit (30) (see col. 6, lines 29-38). Port (PT₂) is an input of the microprocessor (MP) for receiving data (DT_r) sent from the contactless integrated circuit (5) (see col. 6, lines 65-67). Port (PT₃) of the microprocessor

receives input from the monitoring circuit (DETC), and ports (PT₄-PT_N) are used to output the amplitude value (DVREF) to the monitoring circuit (DETC) (see Fig. 3).

Thus, *Charrat* discloses no functionality in the microprocessor (MP) which would allow the microprocessor to power down specific circuits in order to save power.

Furthermore, *Charrat* does not disclose a measuring device which sends a control signal to the switching apparatus which, as a result of receiving the control signal, connects the communication element to an energy source. *Charrat* discloses three embodiments of monitoring circuit DETC which receives the envelope signal SE (see col. 7, line 65 – col. 8, line 2). DETC1 and DETC2 compare the envelope signal SE with VREF to determine whether or not a contactless integrated circuit is present (see Figs. 6-9B and col. 8, lines 22-35 and col. 8, line 63 – col. 9, line 20). DETC3 “simply comprises an analog-to-digital converter ADC and the actual monitoring of the envelope pulses is here performed by the microprocessor MP. The converter ADC thus receives the envelope signal SE at input and delivers a digital amplitude value DSE that is applied to ports of the microprocessor” (see col. 9, lines 25-32).

In summary, DETC1 and DETC2 perform a comparison between the envelope signal SE and VREF while DETC3 merely outputs the digitized envelope signal SE to the microprocessor and the microprocessor performs the comparison (see col. 9, lines 49-52). Using the DETC and the microprocessor, a reader becomes aware that a contactless integrated circuit is within communication range of the reader. *Charrat* does not disclose that once the reader becomes aware of the presence of a contactless integrated circuit, the reader connects the communication element to an energy source. Thus, *Charrat* fails to disclose a switching apparatus as required by amended claim 1 since *Charrat* does not disclose switching on the communication element by connecting the communication element to an energy source.

Finally, *Haffner* fails to cure the shortcomings of *Schuermann* and *Charrat*. *Haffner* discloses a proximity sensor which senses the approach of an initiator or trigger (4) by the change of the impedance of the coil (L) or the capacitor (C) (see Fig. 1 and par. [0031]). *Haffner* does not disclose that as the result of a signal, a switching apparatus connects the communication element to an energy source.

Therefore, the proposed combination of *Schuermann*, *Charrat*, and *Haffner* fails to establish a *prima facie* case of obviousness since none of the references taken together or alone disclose all of the features of amended claim 1.

Amended claim 15 includes features similar to those of amended claim 1 and is likewise allowable for reasons similar to those given above.

Claims 2-6, 8-12, and 17 depend from claim 1, and are therefore patentable as containing all of the recited features of claim 1, as well as for their respective recited features.

Withdrawal of the rejection is kindly requested.

Rejection of claims 7 and 16 under 35 USC 103(a) as being unpatentable over US patent 5,287,112 (*Schuermann*) in view of US patent 6,905,074 (*Charrat*), US 2002/0149376 (*Haffner*), and US patent 6,317,027 (*Watkins*)

Claims 7 and 16 depend from claim 1 or 15 and are therefore patentable as containing all of the recited features of claim 1 or 15, as well as for their respective recited features.

Moreover, *Watkins* does not cure the deficiencies of *Schuermann*, *Charrat*, or *Haffner* since *Watkins* does not disclose a switching apparatus which switches on the

communication element when it has received the control signal from the measuring device by connecting the communication element to an energy source.

Accordingly, the proposed combination of *Schuermann*, *Charrat*, *Haffner*, and *Watkins* does not establish a *prima facie* case of obviousness with respect to claim 1 or 15 from which claims 7 and 16 depend.

Withdrawal of the rejection is kindly requested.

Rejection of claims 13 and 14 under 35 USC 103(a) as being unpatentable over US patent 5,287,112 (*Schuermann*) in view of US patent 6,905,074 (*Charrat*), US 2002/0149376 (*Haffner*), and US patent 5,491,715 (*Flaxl*)

Claims 13 and 14 depend from claim 1 and are therefore patentable as containing all of the recited features of claim 1, as well as for their respective recited features.

Moreover, *Flaxl* does not cure the deficiencies of *Schuermann*, *Charrat*, or *Haffner* since *Flaxl* does not disclose a switching apparatus which switches on the communication element when it has received the control signal from the measuring device by connecting the communication element to an energy source.

Accordingly, the proposed combination of *Schuermann*, *Charrat*, *Haffner*, and *Flaxl* does not establish a *prima facie* case of obviousness with respect to claim 1 from which claims 13 and 14 depend.

Withdrawal of the rejection is kindly requested.

Conclusion

As a result of the amendment to the claims, and further in view of the foregoing remarks, it is respectfully submitted that the application is in condition for allowance. Accordingly, it is respectfully requested that every pending claim in the present application be allowed and the application be passed to issue.

If any issues remain that may be resolved by a telephone or facsimile communication with the Applicant's attorney, the examiner is invited to contact the undersigned at the numbers shown below.

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Respectfully submitted,

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